## **IDEAL "WIRE-NUTS"**

SOLDERLESS-TAPELESS WIRE CONNECTORS Underwriters' Approved



1. Strip wire. 2. Screw on—that's all. "Wire-Nut" threads on to wire just like a nut on a bolt. The coil shaped spring insert presses (does not cut) clean threads into the stripped wires as the Connector is applied. Wires are tightly compressed and automatically twisted together by powerful grip. Molded composition shell completely protects against shorts, grounds and corrosion such as develop in loose solder and tape connections. Millions in use. Listed by Underwriters' Laboratories, Inc. Sizes 74B and 76B approved as 600 Volt Pressure Cable Connectors for general use. Other sizes approved for 300 Volt use. A size for every need—solid or standard.

Solid of	Decen	are a.	
Cat. No.	Size		Per 1000
30-015	71B	No. 16 & No. 18 up to 3 No. 18; 1 No. 16 & 1 No. 18	 
30-016	72B	No. 14, 16 & 18 AWG up to 1 No. 14 and 1 No. 16—2, 3, or 4 No. 18	
30-017	73B	No. 14, 16 & 18 AWG up to 2 No. 14 and 1 No. 18 or 5 No. 18	 
30-018	74B	No. 12, 14, 16 & 18 AWG up to 2 No. 12 and 1 No. 18; 4 No.	
30-019	76B	18 AWG up to 3 No.	
		10 with 1 No. 18; 4 No. 12 with 2 No. 18; 6 No. 14 with 2 No. 18	 

#### EXCEL PORCELAIN WIRE CONNECTORS

Approved by Underwriters' Laboratories, Inc. Made in one piece, high grade porcelain.

Perfect for roughing in fixture hanging and many

other electrical connections.

No. E-1 30-025 joins combinations of A.W.G. solid and stranded wires up to and including 3 No. 18. Price. No. 30-025 (Bulk only)—per 1000

Price, No. 30-008—per 100 ——; per 1000 ——

#### SET SCREW CONNECTOR



No. 11 and No. 22 listed by Underwriters' Laboratories for 600 volt pressure cable connectors. No. 10 listed as a 300 volt connector for fixture hanging and appliance wiring.

		phance w	iring.
Cat. No.	Size		Per 100 Per 1000
30-210	10	2 No. 14-4 No. 16-5	Per 100 Per 1000
		No. 18 or combinations	-
30-211	10	2 No. 12—3 No. 14	
30 - 222	22	2 No. 10—3 No. 12—6	
		No. 14 or combinations	

## IDEAL CRIMP CONNECTOR

with
"WRAP-CAP" INSULATOR
Underwriters' Approved







CRIMP SLEEVE—Made of steel for maximum strength, cadmium plated for corrosion resistance. Gives greater holding power than any other crimp connector used for pigtail splices. Fully approved with the "Wrap-Cap" Insulator or with tape. Handles all wire combinations from No. 14 through No. 10. Also has fixture connector approval. Compact, strong, vibration-proof.

VIDICUIC	n-proof.	Pri	ce
Cat. No.		Per 100	Per 1000
30-410	In boxes of 100	-	
30-510	In bulk carton of 1000		
	only		

"WRAP-CAP" INSULATOR—Assures perfect insulation on every connection. It never varies—actually gives a joint that is better insulated than the wire itself! Insulates between the wires—with double thickness over sleeve and wire ends. Deep skirt insures greater safety, even when wires are not evenly stripped. Made of the same vinyl insulating material used in TW wire, providing excellent ageing characteristics and resistance to corrosive atmospheres, sunlight, water, alcohol and even gasoline. Listed for maximum temperature of 165° F., easily workable at -10° F.

		Price
Cat. No.		Per 100 Per 1000
30-415	In boxes of 100	— —
30-515	In bulk carton of 1000	
	only	

# ELECTRICIANS' PLIERS WITH CRIMPING DIE



8½" Electricians' Pliers with special crimping die—eliminates the need for the special crimping tool. New England nose easily gets into hard-to-reach places, can be used for twisting wires and burring conduit. A single crimping die, for use with IDEAL Crimp Connectors, is located at the point of maximum layering makes a double indenta-

leverage, makes a double indentation—causes copper in wires to cold-flow in all directions for exceptionally strong mechanical joint. Special plastic grips give comfortable, powerful hold. Pliers are unconditionally guaranteed against defects in workmanship and material.

Catalog No. 30-420 ..... Each —

## IDEAL VOLTAGE TESTER

Tests 110 to 600 volts AC/DC, blown fuses, grounded side of lines or motors, excessive leakage to ground, frequency (25 or 60 cy.) D.C. polarity. Double protection provided by solenoid voltage indicator and a neon test lamp—either will function in event other fails. Special features include: Space for prod storage, moisture-proof, molded rubber prod handles with "noslip" safety rings; handy centermount for either prod. Case is double-strength, seamless plastic with covered, fog-free window. Special layer-wound coil on nylon



spool is firmly secured at both ends. Plastic nameplate is bonded to case—no metallic contacts between inside and outside of case. Available with or with-

out carrying case. Cat. No.

61 - 004	Tester with Carrying Case
61 - 005	Tester only
61-006	Tester with one test prod and special insu-
	lated clamp. Without Carrying Case.
61-007	Tester has all of the safety features of regu-
	lar units, plus special current limiting re-
	sistors in each test prod. Current in the
	leads limited to a maximum of 1 ampered
	at 250 V., protects operator from danger
	resulting from accidental shorts or break-
	downs Even with infinite buss source the

leads limited to a maximum of 1 ampere at 250 V., protects operator from danger resulting from accidental shorts or breakdowns. Even with infinite-buss source, the arc drawn from a short at 250 volt-amperes would not endanger either personnel or equipment. With Carrying Case.

Description

FLUORESCENT FIXTURE TESTER

Pocket-size Flur-Test tells you whether trouble is in fixture circuit, starter or tube. Plugs into starter socket. Two models available—for 15-40 watt tubes and for 85-100 watt tubes. For fixtures with starter behind tubes order extra adapter.

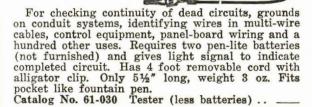


Flur Test (14-40 watt) Catalog No. 61-015
Flur Test (85-100 watt) Catalog No. 61-016
IDEAL



Industrial quality Test-Glo for safe, easy testing of electrical circuits, spark-plugs, motors, fuses, etc. High-grade resistors reduce voltage reaching leads. Long thin handles permit deep probing and have "no-slip" safety rings. Neon lamp is always in line of vision. 24" lead wire (rated 10,000 v.) permits wide span. Cement-sealed and moisture proof. For 80 to 600 v. AC or DC.

# CONTINUITY TESTER



IDEAL FISH TAPE WINDERS



A new tool designed to make the Ideal Fish Tape Reel and Puller still easier to use. As the Winder handle is pulled around the Reel, a wheel spreads the reel housing and allows the fish tape to wind or unwind with least effort. The fish tape, coiling or uncoiling freely within the reel, is easier to handle and can be reeled in or out with far less work.

and can be reeled in or out with far less work.

THREE SIZES—FOR ALL IDEAL FISH TAPE

REELS
31-180 For Reels No. 31-007 & 31-008 ...

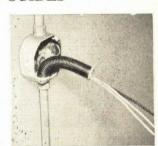
For Reels No. 31-009, 31-016, 31-191

& 31-211 ...

31-182 For Reel No. 31-011 ...

## WIRE GUIDES





No skinned knuckles, no skinned wires—Wire Guides help prevent kinks and let several conductors slide into conduit smoothly and easily. Tempered steel spring forms smooth bend for wire to follow. Knurled aluminum fitting can be used with all types and sizes of boxes, in any position—with plaster rings on or off. Spring will not slip off under pull, yet can be removed with single twist. Sold in sets of 4 assorted sizes or individually. No bushing is necessary with ½" size.

Cat. No.

Size

Price Ea.

 Cat. No.
 Size
 Price Ea

 31-230
 Set of four sizes
 —

 31-231
 ½ inch
 —

 31-232
 ¾ inch
 —

 31-233
 1 inch
 —

 31-234
 1¼ inch
 —

## FISH TAPE PULLER

Mechanical advantage of  $2\frac{1}{2}$  times for tough pulling jobs. Tapes "frozen" into conduit can be readily freed with this new tool. The Ideal Fish Tape Puller

freed with this new tool. pulls the tape and presses the box or other outlet firmly against wall or structural member—no chance of pulling outlet loose. Can be used in outlet boxes, fuse boxes, large pull boxes, large & small conduits — wherever there is a tough wire pulling job.



Cat. No. 31-185 Fish Tape Puller .....ea. -

## IDEAL STRIPMASTER WIRE STRIPPERS



Has only hand type Wire Stripper with automatic single-squeeze operation. Exclusive automatic feature holds jaws open after stripping to permit removal of wire and prevent crushing. A single squeeze of the handles strip wire clean up to a full % inch. No nicking or fraying.

Remove two screws to change blades.

Strips Building, fixture or telephone wire. Automotive, radio and aviation wire, also FM and TV down lead wire.

Cat. No.	Wire Ga.	Wt.		Price Ea.
45-090	8 to 10	10 oz.		. —
15-091				
			**************	
45-093	16 to 22	10 oz.	*************	
45 - 097	16 to 26	10 oz.		

### TEFLON WIRE STRIPPER

Teflon is as easy to strip as any other insulation with this strip-per. Unique blade construction and extreme holding power of broad jaws permits fast, accurate stripping while meeting most rigid inspection standards—where marking of insulation must be kept to an absolute minimum. Just insert wire between blades at desired length (or adjust wire stop), squeeze handle and release. Jaws snap back into position. Cat. No. 45-170 Description



For Nos. 10-14 Wire For Nos. 16-26 Wire 45-171

For Nos. 10-14 Wire (Includes Short Stop 45-180

Latch and Transparent Wire Stop)
For Nos. 16-26 Wire (Includes Short Stop
Latch and Transparent Wire Stop) 45-181

REPLACEMENT BLADES AND ACCESSORIES L-5210

Blades for 45-170, 180 L-5211 Blades for 45-171, 181 L-5269 Short Stop Latch L-5270Transparent Wire Stop

# IDEAL AUTOMATIC E-Z WIRE STRIPPER

For stripping standard lamp and fixture wire, automotive wire and all other stranded wire. Provided with a lever to stop the return of the arms until the wire is removed after stripping. prevents crushing of stranded wire by returning stripper arm. Also, suitable for stripping solid wires.



No. of

Cat. No.	Wire Gauge No.	Holes
45-200	16 through 26	6
45-201	10 through 18	5
45-202	10 through 22	6
45-203	8 through 14	4
	For Flat 300 Ohm TV Downlead	
45-205	For 2 or 3-Wire No. 12 and 14 Non-Me	tallic
	Plastic Sheathed Cable (UF Cable).	
REPLA	CEMENT BLADES FOR E-Z STRIPI	PERS
L-4940		1. 029
L-4941	Blades for 45-201, 026	
L-4943	Blades for 45-203, 027	7. 032
L-4944	Blades for 45-204	
L-4945	Blades for 4	5-205

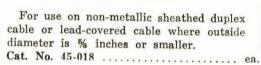
## IDEAL BX ARMOR CUTTER



Cuts BX Armor of any make, two or three wire, in one operation. Hardened steel cutting blade is removable for sharpening or replacement.

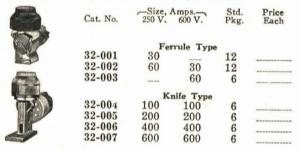
Cat. No. 45-079 BX Armor Cutter ..... ea. -

# IDEAL CABLE RIPPER AND WIRE GAUGE



## IDEAL FUSE CLIP CLAMPS

Eliminate unnecessary watt loss, fuse and fuse clip replacement. Assure proper alignment and positive contact between fuse and clips. The seven sizes listed provide for all possible requirements.



## IDEAL FUSE REDUCERS





KNIFE TYPE

FERRULE TYPE

Protect overfused circuits without expense of special fuses, change in switch panel or equipment. Eliminate fire hazards and burnouts. Handy for emergency use. Fully approved. Listed by Underwriters' Laboratories.

-	250-Volt			600-Volt	
Cat.	Ampere	Price Each	Cat.		Price
33-001	60-30	Lach	No. 33-025	Ampere 60-30	Each
33-002	100-30		33-026	100-30	
33-003	100-60		33-027	100-60	
33-006	200-100		33-030	200 - 100	*****
33-010	400-200		33-034	400-200	
33-015	600-400		33-039	600-400	*****
Othe	r sizes and	prices upor	request.		

## IDEAL "SAFE-T-GRIP" FUSE PULLERS



Non-slipping—formed to fit the fingers, assuring a positive full grip. Eliminates danger of pulling or replacing cartridge fuses by hand. Also suitable for use to adjust loose cutout clips, handling laboratory test tubes, live electrical parts, etc. Laminated fibre

constitu	Culon.			
Cat. No.	Size	Length	For Fuse Diams.	List
34 - 001	Midget	5"	1/4" to 1/2"	
34-002	Pocket	71/2"	1/2" to 1 1/2"	
34-003				
34-003	Giant	12"	1" to 21/2"	

## IDEAL FISH TAPE REELS AND PULLERS

Invaluable for building construction and industrial work. Reel serves as handle to give firm grip in pulling on fish tape, eliminating special pullers, dangerous bare-hand pulling.

Saves 50 per cent of the work-2

man's	tin	ne.	$\mathbf{K}$	eep	s tape	e f	ully			1	
protec	eted.	Ta	pe	is	locked loose.			when	not	in	use

Cat. No.	Len	gth & Size of Tape	Price Ea.
31-007		1/8 x .045 (3/64")	
31-008	50 ft. 2	1/8 x .060 (1/16")	
31-009		1/8 x .060 (1/16")	
31-011	100 ft. :	1/4 x .060 (1/16")	
31-016	200 ft. :	1/8 x .060 (1/16")	

## **IDEAL FISH TAPES**

Highest grade tempered spring steel is used. No curling. Flexible and easy to use on long runs of conduit having several bends.

Cat. No.	Length & Size of Tape	Price Ea.
31-004	50 ft. x 1/8 x .060 (1/16")	
31 - 036	100 ft. x ½ x .060 (1/16")	
31 - 038	200 ft. x 1/8 x .060 (1/16")	
31 - 050	100 ft. x ¼ x .060 (1/16")	
31 - 052	200 ft. x ¼ x .060 (1/16")	
31 - 078	50 ft. x \( \frac{1}{8} \) x .045 (3/64")	
31 - 079	100 ft. x ½ x .045 (3/64")	—

## IDEAL COIL-FLEX FISH TAPE



For all types of conduit. The Ideal Coil-Flex is extremely flexible; can be pushed or pulled with little effort through any and all bends allowed by the electrical code. Positively prevents cutting or damaging of aluminum. Ends are smooth and round to avoid catching or snagging.

The Coil-Flex consists of a 25-ft. length of steel spring 11/32 inch in diameter with a rustproof inner steel cable. A male fitting on one end and a female fitting on the other makes it easy to join together two or more lengths for jobs requiring a longer tape. Easy on the hands, it gives a safe, positive grip. Every Coil-Flex is factory inspected and tested at 400 pounds pull.

Cat. No. 31-081 25-ft. length \_\_\_\_\_ each -

#### IDEAL WIRE-LUBE

Makes wire pulling easier and saves time. Protects insulation against breaks and strains. It can be used on rubber, lead or plastic covered wire or cable. The lubricant may be applied by hand or brush. Wire or cable actually "rides" on a film of Lubricant which dries to a fine powder. Ideal for use when adding extra wires in a conduit already containing wires.

Cat. No. 31-251 Gal. size ea. Cat. No. 31-250 Quart size ea.



### IDEAL FISH TAPE LEADER

"Guides" flat fish tape easily around bends in conduit-allows the tape to slide without jamming or binding around 90° bends. Leader fastens easily to flat tape. Factory tested for 400 lb. pull.



Cat.	No.	31-082	20"	Leade	r	each	
Cat.	No.	31-083	Fish	Tape	Ball	each	

## IDEAL ROUND FISH TAPE

Made especially for use in small conduit (1/2" and less). Round Fish Tape easily goes through small radius bends. Has less friction-resistance than flat tapes so it can be readily pushed or pulled through conduit. Because it is round, it rolls onto a reel without kinking or bind-

ing. Tape is .080-in. diameter and has Fish Tape Ball on one end which lets it swivel and turn.

Cat. No.	Shipping Description Wt. (lbs.) Length Price Ea.
31-191	Tape with Reel5100 ft
31-195	Round Tape & Ball 11/2 50 ft.
31-196	Round Tape & Ball 3100 ft
31-197	Round Tape & Ball 51/2 200 ft
31-084	Fish Tape Ball for Round Tape

## NYLON COVERED FISH TAPE

Nylon-insulated Round Fish Tape gives more protection to workmen and equipment than bare fish tape when pulling new wires into live panel boards, switches and other "hot" equipment. Wire is .080" in diameter and nylon is .020" thick. For easy turning and swiveling, tape has special Fish Tape Ball.



Cat. No.	Description	Shipping Weight	Length	Price Ea.
31-211	Nylon Covered Tape & Reel4		100 ft	
31-215	Nylon Covered Tape & Ball		50 ft.	
31-216	Nylon Covered Tape & Ball		100 ft	
31-217	Nylon Covered Tape & Ball		200 ft	

# IDEAL "THERMO-GRIP" SOLDERING TOOLS



Operates on resistance heating principle. Heats instantly, concentrating heat on part to be soldered, eliminates fire hazard and danger of melting nearby joints — does not oxidize tin in solder, weaken it, or discolor finished job. Thumb switch for heat control, all parts fully insulated, low voltage operation. Set consists of combination power unit, carrying case, secondary lead assembly one or more attachments, such as Plier Attachment, which heats work in jaws; Fork Attachment, for restricted places; Pencil Attachment, for spot and seam soldering. WHEN ORDERING specify (1) Power Unit (2) Secondary Leads (3) Attachments desired.

## 1,000-WATT MODEL AND ATTACHMENTS

Description

12-062 Power Unit, 115V, 50-60 Cy.       \$
450-WATT MODEL AND ATTACHMENTS (Attachments are identical to 1,000-watt except proportionately smaller in size)
12-072 Power Unit, 115V, 50-60 Cy.       \$

## IDEAL ELECTRIC ETCHERS

The Universal Etcher illustrated is portable. Marks iron, steel and their alloys, such as tools, parts and material. Depth of mark is governed by speed of move-

Cat. No.



and material. Depth of mark is governed by speed of movement and by heat switch, leaving a permanent mark. Four etching heats—120, 240, 420 and 700 watts—give a wide range of marking control. Cover forms work plate for small tools and parts. Unit includes 4 oz. etching tool, ground clamp with 4' leads size, 8%" x 5%" x 7. Shipping weight 19 lbs.

Cat. No.	Description Price Ea.
11-009	Standard, 115 v., 50-60 cy \$
11-048	Machine Shop, 115 v., 50-60 cy
11-081	Universal, 115 v., 50-60 cy

## THERMO-TIP SOLDERING TOOL

For soldering electronic circuits and parts, instruments, Radio and TV work in production or repair. Heats instantly — concentrates heat, only on the part



Chisel Tip Irons are also available.

### IDEAL ELECTRIC ETCHERS

#### IDEAL ELECTRIC MARKER



Marks any material — glass, metal, ceramics, etc., light weight but built for rugged, industrial use. Vibrator type—7200 strokes per

min. Stroke and impact easily adjustable. For average marking, order with alloy point. For marking extra hard material (50 to 64 Rockwell, Scale C), order with diamond point.

Cat. No.		Price Ea.
11-100	With alloy point, 115 v, 60 cy	
11-101	With diamond point, 115 v, 60 cy	
L-2180	Extra alloy point	
L-2647	Extra diamond point	

## IDEAL ELECTRIC TACHOMETER

Gives accurate check on production speeds. Two sizes for speeds up to 5000 r.p.m. Accurate to plus or minus 1 per cent of full scale deflection.

Consists of small generator coupled to electric meter, which is capable of withstanding a momentary over-



Ing a momentary overload up to four times the maximum speed.

The meter has two scales—"high" and "lo" easily changed from one to the other with a switch. The units may be used together as a "Hand Type" Tachometer, or for many applications including permanent mounting. Weight 3 lbs.

Cat. No.	Description	Wt. Lbs. Each	Price Ea.
50-001	0-2500 r.p.m	3	
50-002	0-5000 r.p.m	3	

Price

## IDEAL COMMUTATOR RESURFACERS



Hand Type Resurfacers are used by simply holding the Resurfacer against the commutator and moving it from side to side as the motor turns over, under its own power. Ideal Resurfacers are made in many sizes and grades.

## Specifications and Prices on Request. IDEAL PRECISION GRINDERS For Commutators and Slip Rings



Portable. For truing commutators and slip rings in their own bearings at normal operating speeds. Accurate to 1/1000 inch. New bracket supports make possible use on practically

every type of machine. Carrying case at no extra charge.

## Specifications and Prices on Request. IDEAL FLEXIBLE ABRASIVE

A fine grain, non-dust-Commutator Cleaner and cleaner It is non-coning abrasive serves as a Cleaner and



								Price
82-001	3/8	X	1/2	X	5		ea.	\$
82-002	3/8	X	3/4	X	5	***	ea.	-
82-003	5/8	X	1	X	5		ea.	

#### IDEAL BRUSH SEATER



riser.

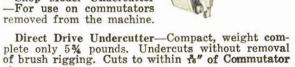
For seating carbon-graphite or metal composition brushes. not remove or scratch copper. Available in 11 sizes. Standard size 4% x 1% x 5%.

Catalog No. 23-008 (4¾ x 4½ x 5%) .... \$-

#### IDEAL MICA UNDERCUTTERS

Universal Model - For field and shop use—heavy duty service. Cuts to within 4" of Riser. Works in space only 2%" wide. Used without removing brush rigging.

Shop Model Undercutter For use on commutators removed from the machine.



			Price
No.	25-029	Universal 115V, 50/60 C.	\$
No.	25-038	Shop Model 115V, 50/60 C.	
No.	25-001	Direct Drive 115V, 50/60 C.	

# IDEAL COMMUTATOR SLOTTING SAWS AND MILLING CUTTERS



Made of special high speed steel. Available in all types and sizes. Prices on request.

#### IDEAL COMMUTATOR SLOTTING FILES

Specially designed for commutator use. Extremely hard, fast-cutting and long lived. Tapered and curved to allow for rocking motion.

No.	Description	Price
1	Straight Edge Cat. No. 20-012	\$
2	Knife Edged Cat. No. 20-013	
3	8" Double End Cat. No. 20-007	
4	7" Double End Cat, No. 20-008	
5	Single End Cat. No. 20-009	

#### IDEAL COMMUTATOR CEMENT

A non-conductor, regardless of age. Highly adhesive. When once dry it stays in place and will not shrink.

1/2 lb. Can Cat. No. 54-007 \_\_ 1 lb. Can Cat. No. 54-008



#### IDEAL BRUSH SEATER

For seating carbon-graphite or metal composition brushes. Brush is accurately seated under operating conditions, without shutting down the machine. 5 sizes available. Prices on request.

Cat. No. 23-008 (4¾" x 1¾" x ¾" face) \_\_ \$\_\_\_

## IDEAL HAND TYPE CLEANERS



Developed through years of air-engineering experience, the improved Ideal Cleaner will do a better job, faster, at less cost. These light weight, perfectly balanced cleaners handle a wide range of work. Blows, vacuums and sprays. Can be operated continuously at peak efficiency and with amazing economy.

Delivers air at higher velocity (Heavy Duty Model—26,500 feet per minute) yet, because it blows only dry air at low pressure the Ideal Cleaner does not harm even delicate equipment. Blower Nozzle is furnished as standard with Ideal Hand Type Cleaners.

Cat. No.	Description	Price Ea.
22-110	Heavy Duty Model (1 1/3 H.P.)	
22-113	Medium Duty Model (2/3 H.P.)	. —
22-163	Light Duty Model (1/2 H.P.)	. ——



# STANDARD ATTACHMENTS FOR USE WITH HAND TYPE

CLEANERS

Dust-proof bag, hose connection (inlet side), flexible hose (4 ft. x 1½ inches), metal nozzle (5 inch) and brush, flat fibre nozzle and shoulder strap.

Cat. No. 22-109 Std. Attachment Set ... ea. -

## IDEAL CONVERSION PACK

Convert your Ideal Blower into a Tank Cleaner with the Conversion Pack. Consists of 12-gallon tank and dust-tight bag. Adaptable to any of the following:

Heavy Duty Models:

Nos. 22-110, 22 111, 22-112

Medium Duty Models: Nos. 22-113, 22-114, 22-115

Cat. No. 22-216 .....

### IDEAL INSULATION TESTER



Detects grounds, shorts and broken wires. Tests up to 2500 volts. Seven test voltages: 500, 1000, 1250, 1500, 1750, 2000, and 2500.

Operates from any electrical outlet. All

are fully and carefully insulated. Spring operated safety sleeves, over the test points, which can only be bared by pressing forward the buttons on side of handles. Has three wire safety type cord. Rating 600-volt amp. (maximum).

Cat. No. 41-001 115 v., 50-60 cy. .....

## IDEAL TANK-TYPE CLEANER

Ideal Tank-Type Cleanerfor better, faster cleaning. Particularly valuable for scrap collection and in removing water from factory or service station floors.

Unique filtering system eliminates the (conventional) external bag. Easily emptied. Remove the vacuum sealed lid and lift out the 9-gallon tank and dust bag.

Cleaner has large 5-inch wheels. Swivel wheels in the front. Small width clearance permits the Cleaner to be moved down narrow aisles. Low center of gravity makes

it difficult to upset.

The 1½ H.P. motor provides ample power without overheating. Complete with 30-foot cord and a handy storage compartment for attachments.



#### ORDER ATTACHMENTS SEPARATELY

Cat. No. Description 22-200 Tank Cleaner Only, 115 v., AC-DC 22-201 Tank Cleaner Only, 230 v., AC-DC -

#### IDEAL STANDARD TANK CLEANER

Tank Cleaner, Hand Cleaner and Blower All in One

Here is the answer to cleaning requirements for industrial, and commercial establishments, theatres and institutions. Does the work of two or more ordinary Cleaners. Used as a Tank Cleaner, it picks up dirt, dust and metal particles. Quickly removes water from floors after scrubbing and it is especially valuable in scrap collection. The power unit is a complete unit in itself.



Removed from the tank it becomes a powerful, handtype vacuum cleaner or blower.

#### SPECIFICATIONS UPON REQUEST

Standard Cleaners are available in two models: Heavy Duty (11/3 H.P.) & Medium Duty (1/3 H.P.).

Cat. No. 22-210 11/3 H.P., 115 v., AC-DC -Cat. No. 22-213 % H.P., 115 v., AC-DC —

# ORDER ATTACHMENTS SEPARATELY IDEAL TANK CLEANER ATTACHMENTS

Standard Set of Attachments complete for either of the above Tanks. Cat. No. 22-217. .....

Many other special attachments available.